

What is claimed is:

1 ~~1.~~ A method of switching a signal including the steps of:
 2 coupling an input to output by plural stages of switching; *fig 3, embodiment 2*
 3 processing the signal switching by coding techniques in one stage of the plural
 4 stages of switching;
 5 processing the signal switching by timing techniques in another stage of the plural
 6 stages of switching; and
 7 coordinating the coding techniques and timing techniques to couple a signal at an *emb, line 13*
 8 input port to a predetermined output port

1 2. The method of claim 1, wherein the processing in one stage includes;
 2 switching by timing techniques includes a time slot interchange step; and
 3 switching by coding techniques includes a code division step.

1 3. The method of claim 1, further including a step of:
 2 despredading a code division signal:
 3 time multiplexing the despread code division signal; and *OK*
 4 respredading the time multiplexed signal.

1 4. The method of claim 1, further including a step of:
 2 spread coding a time multiplexed signal; *OK*
 3 code division switching the spread coded signal; and
 4 time multiplexing the code division switched signal.

1 5. The method of claim 2, further including a step of: *OK*
 2 combining signals into beams and encoding the beams with overspredading
 3 techniques to identify a destination; and
 4 coding individual signals to identify a particular user.

1 ~~6.~~ A time division code switch, comprising: *fig 2, embodiment 1*
 2 an input for accepting a code division modulated signal and including an input
 3 despreader to decode the code division modulated signal;
 4 a time slot interchanger connected to receive the decoded code division
 5 modulated signal, the time slot interchanger re-arranging the time slots of each frame to
 6 couple input to a designated output;

respreading circuitry connected to an output of the time slot interchanger; and
an output for directing respread signals to their destination.

7. The time division code switch of claim 6, comprising:

a code bus for delivering CDMA beams to a plurality of despreaders at the input;

and

a summer connected to sum a plurality of spread signals having a common
destination to form a beam directed to that destination.

8. A method of switching a signal in a communication system combining Code
division and time multiplexing, comprising the steps of:

defining a plurality of stages of switching in which;

applying a code switching technique in at least one stage; and

applying a time switching technique in at least another stage.

9. The method of claim 8, wherein:

code switching includes a step involving code division processing; and

time switching includes a step involving time slot interchanging.

10. The method of claim 8, wherein:

code switching includes a step involving code division processing; and

time switching includes a step involving time slot multiplexing.

11. The method of claim 8, wherein a step of

code switching includes a step of despread code division modulated signals.

12. The method of claim 11 wherein:

time switching includes a step of time multiplexing the despread code division
modulated signal.

*specific to
CDMA standards*